APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,691	03/17/2000	Masahiko Yamaguchi	35.C14352	3713

			EXAMINER
5514	7590	12/07/2004	ARANI, TAGHI T

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ART UNIT	PAPER NUMBER
2131	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/527,691	YAMAGUCHI, MASAHIKO
	Examiner	**Art Unit**	
	Taghi T. Arani, Ph.D.	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 August 2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claims 1-18 are pending in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior arts of

record, U.S. Patent 5,805,700 to Nardone et al. in view of U.S. Patent No. 5,412,730 to Jones.

Referring to claim 1, Nardone et al. teach a data processing apparatus comprising:

input means for inputting data to be transmitted [see Figure 5, (CVD+), 16];

extracting means for extracting a particular portion of the data input from the

input means [column 4, lines 49-51];

encrypting means for encrypting the particular portion extracted by the extracting means [see

Figure 5, Encryption Module, 12'] without encrypting a remaining portion not extracted by the

extracting means [col. 3, lines 44-54, i.e. each BTU containing the start code of either a group of

pictures, an I-frame 30, one of the B-frames 32 or one of the P-frames 34 is encrypted and that

compressed video data (CVD+) is partially encrypted];

combining means for combining the particular portion encrypted by the encrypting means

with the remaining portion not encrypted by the encrypting means [figure 8, col. 4, lines 42-48];

and

Nardone et al. do not teach a transmitting means for transmitting data combined by the combining means.

Jones does teach a transmitting means for transmitting encrypted and nonencrypted data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claims 2-4 and 6, Nardone et al. as modified teach a data processing apparatus according to claim 1, wherein [see column 2, lines 46-48]:

the data is print data, and the extracting means extracts a print control code from the print data as the particular portion.

the data is image data whose one pixel has a plurality of bits, and the extracting means extracts predetermined upper bits of each pixel from the image data as the particular portion.

the data is voice data encoded into codes each having a plurality of bits, and the extracting means extracts predetermined discrete bits of each code from the encoded voice data as the particular portion.

the data is data compressed by using a conversion table, and extracting means extracts the conversion table from the compressed data as the particular portion.

Nardone et al. teach a selective encryption using video data, which is in digital format. Image data, voice data, compressed data, and print data, once read into a computer, are also in digital format.

Referring to claim 5, Nardone et al. as modified teach a data processing apparatus according to claim 4, wherein the extracting means extracts bits at a predetermined interval of bits from each code [see Figure 4, see also col. 3, lines 65 through col. 4, line 5, i.e. a fraction of BTUs of frames (such as every 3 of 4 BTUs of an I-frame, and every forth BTU of an P-frame) are encrypted].

Referring to claim 7, Nardone et al. teach a data processing apparatus according to claim 1, further comprising transmission buffer means, wherein said combining means combines the particular portion encrypted by the encrypting means with the remaining portion not extracted by extracting means, in the transmission buffer means [figure 8, Selector 12", {CVD+} 18].

Referring to claim 8, Nardone et al. teach a data processing apparatus comprising:

extracting means for extracting an encrypted portion from the data received by the receiving means [column 4, lines 49-51];

decrypting means for decrypting the encrypted portion extracted by the extracting means [see Figure 5, Encryption Module, 12'] without decrypting a remaining portion not extracted by the extracting means [col. 3, lines 44-54];

combining means for combining the portion decrypted by the decrypting means with the remaining portion not decrypted by the decrypting means [fig. 8] ; and

output means for outputting data combined by the combining means [see Figure 5, {CVD+}, 18].

Nardone et al. do not explicitly teach a decryption side, though they do suggest a decryption side [column 3, lines 60-61].

Jones explicitly shows [see Figure 3] that the process performed on the encryption side (transmitting side) is the reverse process of that performed on the decryption side (receiving side). So with the teachings of Jones in mind, it is obvious to one skilled in the art that though Nardone et al. do not explicitly teach decryption in the above mentioned manner in order for the data to be decrypted a mirror process must occur.

Nardone et al. do not teach a receiving means for receiving data.

Jones does teach a receiving means for receiving data [see Figure 1, 13, communication channel]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claims 9 -11 and 13, Nardone et al. as modified teach a data processing apparatus according to claim 8, wherein [see column 2, lines 46-48]:

the data is print data, and the encrypted portion is a print control code.

the data is image data whose one pixel has a plurality of bits, and the encrypted portion is predetermined upper bits of each pixel of the image data.

the data is voice data encoded into codes each having a plurality of bits, and the encrypted portion is predetermined discrete bits of each code.

the data is data compressed by using a conversion table, and the encrypted portion is the

conversion table. Nardone et al. teach a selective encryption using video data, which is in digital

format. Image data, voice data, compressed data, and print data, once read into a computer, are

also in digital format.

Referring to claim 12, Nardone et al. as modified teach a data processing apparatus

according to claim 11, wherein the encrypted portion is bits of each code at a predetermined

interval of bits [see Figure 4].

Referring to claim 14, Nardone et al. as modified teach a data processing apparatus

according to claim 8, further comprising output buffer means, wherein said combining means

combines the particular portion extracted by the extracting means with the remaining portion not

extracted by the extracting means in the output buffer means [figure 8, Selector 12", (CVD+}

18].

Referring to claim 15, Nardone et al. teach a data processing method comprising:

an input step of inputting data to be transmitted [see Figure 5, (CVD+), 16];

an extracting step of extracting a particular portion of the data input at the input step

[column 4, lines 49-51];

an encrypting step of encrypting the particular portion extracted at the extracting step [see

Figure 5, Encryption Module, 12'];

a combining step of combining the particular portion encrypted at the encrypting step

with a remaining portion not extracted at the extracting step [figure 8]; and

Nardone et al. do not teach a transmitting step of transmitting data combined at the

combining step. Jones does teach a transmitting step of transmitting data combined at the

combining step [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means.

One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above

for the purpose of allowing the data to be sent to authorized users over insecure communication

channels.

Referring to claim 16, Nardone et al. teach a data processing method comprising:

an extracting step of extracting an encrypted portion from the data received at

the receiving step [column 4, lines 49-51];

a combining step of combining the portion decrypted at the decryption step with a

remaining portion not extracted at the extracting step [figure 8];and

an output step of outputting data combined at the combining step [figure 8].

Nardone et al. do not explicitly teach a decryption side, though they do suggest a decryption side

[column 3, lines 60-61].

Jones explicitly shows [see Figure 3] that the process performed on the encryption side

(transmitting side) is the reverse process of that performed on the decryption side (receiving

side). So with the teachings of Jones in mind, it would have been obvious to one skilled in the art

that though Nardone et al. do not explicitly teach decryption in the above mentioned manner in

order for the data to be decrypted a mirror process must occur.

Jones does teach a receiving step of receiving data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means.

One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above

for the purpose of allowing the data to be sent to authorized users over insecure communication

channels.

Referring to claim 17, Nardone et al. teach a data processing program for controlling a

computer to perform data processing [see column 4, lines 57-59], said program comprising codes

for causing the computer to perform:

an input step of inputting data to be transmitted [figure 8, (CVD+) 16];

an extracting step of extracting a particular portion of the data input at the input

step [column 4, lines 49-51];

an encrypting step of encrypting the particular portion extracted at the extracting

step [column 4, lines 48-51];

a combining step of combining the particular portion encrypted at the encryptin4

step with a remaining portion not extracted at the extracting step [figure 8 , {CVD+} 18]; and

Nardone et al. also do not teach a transmitting step of transmitting data combined at the

combining step.

Jones does teach a transmitting step of transmitting the particular portion encrypted at the

encrypting step and a remaining portion not extracted at the extracting step. [see Figure 1, 13,

communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means.

One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above

for the purpose of allowing the data to be sent to authorized users over insecure communication

channels.

Referring to claim 18, Nardone et al. teach a data processing program for controlling a

computer to perform data processing [see column 4, lines 57-59], said program comprising codes

for causing the computer to perform:

an extracting step of extracting an encrypted portion from data received at the

receiving step [column 4, lines 49-51];

a combining step of combining the portion decrypted at the decrypting step with a

remaining portion not extracted at the extracting step [figure 8. {CVD+} 181: and

an output step of outputting data combined at the combining step [fig. 8,

{CVD+} 18].

Nardone et al. do not explicitly teach a decryption side, though they do suggest a

decryption side [column 3, lines 60-61].

Jones explicitly shows [see Figure 3] that the process performed on the encryption side

(transmitting side) is the reverse process of that performed on the decryption side (receiving

side). So with the teachings of Jones in mind, it would have been obvious to one skilled in the art

that though Nardone et al. do not explicitly teach decryption in the above mentioned manner in

order for the data to be decrypted a mirror process must occur.

Nardone et al. do not teach a receiving step of receiving data . Jones does teach a

receiving step of receiving data [see Figure 1, 13, communication channel]. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone

et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Conclusion

Prior arts made of record, not relied upon:

US 6,314,188 is directed motion picture data encrypting method and system wherein of I, P and B pictures contained in an MEG 2 data stream, only the I picture is subjected to encryption such as scramble processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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